

## ABSTRACT OF THE DISCLOSURE

An improved synchronization system and method for copies of data in a computer system. The computer system comprises a cluster, wherein each computer in the cluster  
5 may store a local copy of a data set along with a validity flag for the local copy. The computer system further comprises a coupling system which is connected to each of the computers in the cluster through a coupling system interface program, wherein the coupling system is configured to coordinate the data sharing and workload of the cluster. The computer system also comprises an external data storage shared by the computers in  
10 the cluster. One of the computers may read a first copy of the data set from a primary data set on the external data storage. The computer may then store the first copy locally and set a first validity flag to indicate that the first copy is valid. Another computer, server, or application program may make a second copy of the primary data set and set a second validity flag to valid. If the first copy is modified, then the second validity flag is  
15 set to invalid. The second copy may then be replaced with the modified copy, and the second validity flag may be set to valid again. A coupling system interface program may comprise an application programming interface for data synchronization, wherein the application programming interface is accessible by a plurality of application programs.

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